

1 54. (NEW) The apparatus of claim 1 wherein the  
2 constricted passage has a fixed cross section.

1 55. (NEW) The apparatus of claim 1 wherein the pipette  
2 tip of the first part and the constricted passage of the  
3 second part are designed such that, as the pipette tip  
4 passes through the constricted passage, walls defining the  
5 pipette tip collapse inwardly and form a liquid seal such  
6 that liquid in the pipette tip of the first part is forced  
7 upward into the sample cup of the first part.

1 56. (NEW) The apparatus of claim 1 wherein the pipette  
2 tip of the first part and the constricted passage of the  
3 second part are designed such that, as the pipette tip  
4 passes through the constricted passage, walls defining the  
5 pipette tip collapse inwardly and form a moving liquid seal  
6 such that the moving liquid seal progresses up the pipette  
7 tip as the pipette tip passes through the constricted  
8 passage.

1 57. (NEW) The apparatus of claim 1 wherein the pipette  
2 tip of the first part and the constricted passage of the  
3 second part are designed such that, as the pipette tip  
4 passes through the constricted passage, walls defining the  
5 pipette tip collapse inwardly and form a moving liquid seal  
6 such that the moving liquid seal progresses up the pipette  
7 tip as the pipette tip passes through the constricted  
8 passage, wherein the moving liquid seal forces liquid in  
9 the pipette tip upward into the sample cup.

1 58. (NEW) The apparatus of claim 53 wherein the pipette  
2 tip of the first part and the constricted passage of the

3 second part are designed such that, as the pipette tip  
4 passes through the constricted passage, walls defining the  
5 pipette tip collapse inwardly and form a liquid seal such  
6 that liquid in the pipette tip of the first part is forced  
7 upward into the sample cup of the first part.

1 59. (NEW) The apparatus of claim 53 wherein the pipette  
2 tip of the first part and the constricted passage of the  
3 second part are designed such that, as the pipette tip  
4 passes through the constricted passage, walls defining the  
5 pipette tip collapse inwardly and form a moving liquid seal  
6 such that the moving liquid seal progresses up the pipette  
7 tip as the pipette tip passes through the constricted  
8 passage.

1 60. (NEW) The apparatus of claim 53 wherein the pipette  
2 tip of the first part and the constricted passage of the  
3 second part are designed such that, as the pipette tip  
4 passes through the constricted passage, walls defining the  
5 pipette tip collapse inwardly and form a moving liquid seal  
6 such that the moving liquid seal progresses up the pipette  
7 tip as the pipette tip passes through the constricted  
8 passage, wherein the moving liquid seal forces liquid in  
9 the pipette tip upward into the sample cup.

1 61. (NEW) The apparatus of claim 54 wherein the pipette  
2 tip of the first part and the constricted passage of the  
3 second part are designed such that, as the pipette tip  
4 passes through the constricted passage, walls defining the  
5 pipette tip collapse inwardly and form a liquid seal such  
6 that liquid in the pipette tip of the first part is forced  
7 upward into the sample cup of the first part.